CLAIMS

1. A method for treating or preventing atherosclerosis in a mammal, comprising:

providing an agent for inhibiting interaction between P-selectin and a ligand of P-selectin, and

administering said agent to a mammal in need of such treatment to cause such inhibition to occur.

2. The method of claim 1 wherein said P-selectin is on a cell.

3. The method of claim 2 wherein said cell is an endothelial cell.

4. The method of claim 2 wherein said cell is a platelet.

5. The method of claim 1 wherein said ligand comprises a carbohydrate.

6. The method of claim 1 wherein said ligand comprises a glycoprotein.

7. The method of claim 1 wherein said ligand is selected from the group consisting of sialyl-Lewis x, sialyl-Lewis a, sialyl-Lewis x-pentasaccharide, polylactosaminoglycan, carbohydrate containing 2,6 sialic acid, Lewis x 3'-0-sulfate, heparin oligosaccharides, PSGL-1, 160 kD monospecific P-selectin ligand and lysosomal membrane glycoproteins.

8. The method of claim 1 wherein said ligand is on a cell selected from the group consisting of monocytes, neutrophils, eosinophils, $CD4^+$ T cells, $CD8^+$ T cells, and natural killer cells.

9. The method of claim 1 wherein said ligand is on a leukocyte.

10. The method of claim 9 wherein said leukocyte is a neutrophil.

11. The method of claim 9 wherein said leukocyte is a monocyte.

12. The method of claim 1 wherein said P-selectin can bind to said ligand in the absence of said agent.

13. The method of claim 1 wherein said agent is selected from the group consisting of a soluble form of at least a portion of said P-selectin and a soluble form of at least a portion of said ligand and mixtures thereof.

14. The method of claim 1 wherein said agent is an inhibitory protein.

15. The method of claim 14 wherein said inhibitory protein is selected from the group consisting of an antibody against at least a portion of said P-selectin and an antibody against at least a portion of said ligand and mixtures thereof.

16. The method of claim 15 wherein said antibody is a monoclonal antibody.

17. The method of claim 1 wherein said agent is an inhibitory peptide.

18. The method of claim 17 wherein said P-selectin has a first binding site for said ligand and said ligand has a second binding site for said P-selectin, and wherein said inhibitory peptide is a peptide selected from the group consisting of at least a portion of said first binding site and at least a portion of said second binding site and mixtures thereof.

19. The method of claim 1 wherein said agent is an inhibitory carbohydrate.

20. The method of claim 19 wherein said inhibitory carbohydrate is selected from the group consisting of sialyl-Lewis x and its analogs, sialyl Lewis a and its analogs, heparin oligosaccharides and carbohydrates containing 2,6 sialic acid.

21. The method of claim 1 wherein said agent is an inhibitory glycoprotein.

22. The method of claim 21 wherein said inhibitory glycoprotein is selected from the group consisting of PSGL-1, 160 kD monospecific P-selectin ligand, lysosomal membrane glycoprotein and glycoprotein containing sialyl-Lewis x.

23. The method of claim 1 wherein said agent is an inhibitory sulfatide.

24. The method of claim 1 wherein said agent is selected from the group consisting of an analog of said P-selectin and an analog of said ligand and mixtures thereof.

25. The method of claim 1 wherein said agent is a substance derived from snake venom or a plant extract.

26. The method of claim 1 wherein said agent is an inhibitor of granular release.

27. The method of claim 1 wherein said agent is an inhibitor of a molecule required for the synthesis, post-translational modification or functioning of said P-selectin or said ligand.

28. The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand so as to at least partially prevent formation of an atherosclerotic fatty streak.

29. The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand so as to at least partially prevent formation of an atherosclerotic intermediate lesion.

30. The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand so as to at least partially prevent formation of an atherosclerotic fibrous plaque.

31. The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand so as to at least partially prevent growth of an atherosclerotic lesion after a surgical procedure for at least partially preventing restenosis.

32. The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand so as to at least partially reverse a formed atherosclerotic fatty streak.

33. The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand so as to at least partially reverse a formed atherosclerotic intermediate lesion.

34. The method of claim 1 wherein said agent inhibits interaction between said P-selectin and said ligand so as to at least partially reverse a formed atherosclerotic fibrous plaque.

35. The method of claim 1 wherein said administering occurs prior to formation of an atherosclerotic lesion.

36. The method of claim 1 wherein said administering occurs subsequent to formation of an atherosclerotic lesion.

37. The method of claim 1 wherein said mammal is a human.

38. A therapeutic agent in a dosage form and concentration suitable for treating or preventing atherosclerosis in a mammal in need of such treatment, said agent being effective to inhibit interaction between P-selectin and a ligand of P-selectin.